Clot, Clot & More Clot: A Multi-Modality Thrombectomy Approach for Complex Venous Thrombosis

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Disclosures

Speaker’s Bureau:
• Astra Zeneca
• Maquet
• Spectranetics

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• Astra Zeneca
• Terumo
• Cordis
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• Bard
• Veryan Medical
• Spectranetics

Medical/Scientific Boards:
• Abbott Vascular
Clinical Profile

• 75 Year Old Man presents with severe RLE swelling for 1 week
  • Duplex U/S in office reveals extensive femoral venous thrombosis
  • Iliofemoral thrombosis extending into IVC
  • Severe pain/discomfort consistent with PTS
  • Admitted and started on heparin gtt.
Venograms

- Left CFV Access
  - Unexpected compression seen c/w May-Thurner’s
  - Laminar thrombus in IVC
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- Large Volume Clot Retrieval Needed
  - Clot somewhat organized
  - Upsized to a 22 Fr Gore Dryseal over an Amplatz Super Stiff
  - Flowtriever Thrombectomy Attempted
    - 510K Approval for removal of peripheral emboli/thrombus
    - Self expanding disks enmesh in thrombus
    - Withdrawn into large sheath with concomitant aspiration

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Venograms

• Residual Thrombus Seen
  • Aspiration of thrombus limited by the compression
  • More effective approach would have been to have the sheath down to the level of the thrombus
  • May-Thurner’s Syndrome complicating treatment
Venograms

- May-Thurner’s Treated
  - IVUS-Guided
  - Right External/Common
    - 18 x 40 mm Wallstent- Contracted
    - Probably not a good size in general due to the tendency for contraction and limited precision
  - Left External/Common
    - 16 x 90 mm Wallstent
Venograms

- Following Day
  - Patient placed in prone position
  - Left popliteal vein accessed
  - Extensive thrombus within femoral vein seen
Venograms

- Following Day
  - Patient placed in prone position
  - Left popliteal vein accessed
  - Extensive thrombus within femoral vein seen
  - Contraction of WallStent again seen
Venograms

- **8Fr Zelante Angiojet Used**
  - Pulse-Power Spray of 16 mg Alteplase
  - 45 Minutes dwell time
  - Rheolytic Thrombectomy over multiple passes
Venograms

- Large clot trapped before stent
- Loose material removed with Angiojet
- Residual large organized clot removed with Penumbra Indigo CAT8

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Venograms

- Contracted WallStent addressed
- Extended With a 18 x 60 mm WallStent
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- Thrombus in IVC filter noted
- Addressed with additional 8 Fr Angiojet
Venograms

- Crux filter cleared
- Scheduled for removal after 1 month anticoagulation
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